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Ming-Hung Lin

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EXAMINER

AJIBADE AKONAI, OLUMIDE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/989,255	Applicant(s) LIN, MING-HUNG	
	Examiner OLUMIDE T. AJIBADE AKONAI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 12-16 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 19 is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-16 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1-3, 12, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dervarics 6,553,240** in view of **Erekson 6,622,018**.

Regarding **claim 1** Dervarics discloses a mobile device (mobile phone 100, see fig. 2, col. 4, line 50), comprising: a primary communication unit (201, see fig. 2, col. 5, lines 10-13) configured to establish a primary communication session via a transcoding proxy (WAP gateway, see col. 3, lines 51-54) with a content server (communication between web server and WAP device 100 via WAP gateway, see fig. 1, col. 3, lines 51-62); and an auxiliary communication unit (202, see fig. 2, col. 5, lines 15-18) configured to establish an auxiliary communication session (110, see fig. 1, col. 3, lines 38-40) with an auxiliary rendering device (printer 120, see fig. 1, col. 3, lines 38-40), the auxiliary

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communication session including content of the primary communication session that is adapted to the capabilities of the auxiliary rendering device (receiving data from a web server, the data being properly formatted for the WAP device 100 by WAP gateway and forwarding the content to the WAP device 100, which then sends the content to a printer 120, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

Dervarics does not specifically disclose wherein the auxiliary communication is configured to receive an assistance message from the auxiliary rendering device, the assistance message comprising information on the rendering capabilities of the auxiliary rendering device.

Erekson however, discloses, a mobile device (portable computer system 100, see fig. 6, col. 8, lines 25-31) comprising auxiliary unit configured to receive an assistance message from an auxiliary rendering device (remote devices 610-630, see fig. 6, col. 8, lines 25-31), the assistance message comprising information on the rendering capabilities of the auxiliary rendering device (remote devices 610-630 transmitting characteristics and capability information from to the portable computer system 100, see col. 10, lines 43-64).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erekson, by transmitting device characteristics and/or capabilities information of a printer from the printer to a WAP enable mobile phone, into the system of Dervarics for the benefit of setting a proper mode of communication between the mobile phone and the printer.

Regarding **claim 2** as applied to claim 1, Dervarics as modified by Erekson discloses the claimed limitation. Dervarics further discloses a rendering unit configured to render content received in the primary communication session (301, see fig. 3, col. 6, lines 59-64, col. 7, lines 1-3); and a rendering control unit configured to examine the content and redirecting the content to the rendering unit and the auxiliary communication unit in dependence on the examination (301, see fig. 3, col. 6, lines 59-64, col. 7, lines 1-8), wherein the auxiliary communication unit is arranged for transmitting the content via the auxiliary communication session for rendering by the auxiliary rendering device (receiving data from a web server, the data being properly formatted for the WAP device 100 by WAP gateway and forwarding the content to the WAP device 100, which then sends the content to a printer 120, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

Regarding **claim 3** as applied to claim 1, Dervarics as modified by Erekson discloses the claimed limitation. Dervarics further discloses wherein the auxiliary communication unit is arranged for establishing the auxiliary communication session in response to the assistance message (receiving identifying commands from server modules for devices 30, 40, and 50, the commands comprising parameters that mobile telephone 1/200 can use to communicate with the devices 30, 40, and 50, see figs. 1-2, col. 6, lines 53-67, col. 7, lines 1-8), and the primary communication means are arranged for transmitting the information on the rendering capabilities to the transcoding proxy (see figs. 1-2, col. 3, lines 51-62, col. 6, lines 53-67, col. 7, lines 1-8).

Regarding **claim 12** as applied to claim 1, Dervarics further discloses a selection device configured to select a most suitable auxiliary rendering device from among a plurality of auxiliary rendering devices based on the rendering capabilities of each of the plurality of auxiliary rendering devices as specified in a plurality of assistance messages respectively received from the plurality of auxiliary rendering devices (receiving identifying commands from server modules for devices 30, 40, and 50, the commands comprising parameters that mobile telephone 1/200 can use to communicate with the devices 30, 40, and 50, see figs. 1-2, col. 6, lines 53-67, col. 7, lines 1-8).

Regarding **claim 13** as applied to claim 1, Dervarics further discloses a selection device configured to select the auxiliary rendering device from among a plurality of auxiliary rendering devices based on at least one of a proximity to the mobile device, and a quickest response time from among each of a plurality of auxiliary rendering devices (see figs. 1-2, col. 6, lines 53-67, col. 7, lines 1-8).

Regarding **claim 16** as applied to claim 1, Dervarics further discloses wherein the content includes audio content and video content (see col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

3. Claims 4-6, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dervarics 6,553,240** in view of **Erekson 6,622,018** as applied to claim 3 above, and further in view of **Novakov 6,571,103**.

Regarding **claim 4** as applied to claim 3, Dervarics as modified by Erekson discloses the claim limitation except wherein the auxiliary communication unit is

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arranged for transmitting an assistance request to at least one auxiliary rendering device.

Novakov, however, discloses a station (see fig. 2, col. 4, lines 58-65) with an auxiliary unit arranged for transmitting an assistance request to at least one auxiliary rendering device (transmitting a page to the mobile station., see fig. 2, col. 5, lines 9-19).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Novakov, by sending a page message from to a device, into the system of Dervarics as modified by Erikson, for the benefit of receiving the identification data associated with the device.

Regarding **claim 5** as applied to claim 4, Dervarics further discloses wherein the primary communication unit is arranged for receiving a communication request for establishing the primary communication session (201, see fig. 2, col. 5, lines 10-13), and the auxiliary communication unit is arranged for transmitting the assistance request in response to receiving the communication request (202, see fig. 2, col. 5, lines 15-18).

Regarding **claim 6** as applied to claim 4, Dervarics as modified by Erikson and Novakov discloses the claimed limitation. Novakov further discloses wherein the auxiliary communication unit is arranged for transmitting the assistance request when a level for the quality of a previously established auxiliary communication session drops below a predetermined value (see fig. 2, col. 4, lines 58-67).

Regarding **claim 14** as applied to claim 1, Dervarics as modified by Erikson and Novakov discloses the claimed limitation. Novakov further discloses a timer for timing a

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time period during which at least one of a plurality of auxiliary rendering devices must respond to the assistance message to avoid an indication that none of the plurality of auxiliary rendering devices are currently available (see fig. 2, col. 4, lines 58-67).

4. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dervarics 6,553,240** in view of **Erekson 6,622,018** and **Wang 6,484,040**.

Regarding **claim 20** Dervarics discloses a mobile device (mobile phone 100, see fig. 2, col. 4, line 50), comprising: a primary communication unit (201, see fig. 2, col. 5, lines 10-13) configured to establish a primary communication session via a transcoding proxy (WAP gateway, see col. 3, lines 51-54) with a content server (communication between web server and WAP device 100 via WAP gateway, see fig. 1, col. 3, lines 51-62); and an auxiliary communication unit (202, see fig. 2, col. 5, lines 15-18) configured to establish an auxiliary communication session (110, see fig. 1, col. 3, lines 38-40) with an auxiliary rendering device (printer 120, see fig. 1, col. 3, lines 38-40), the auxiliary communication session including content of the primary communication session that is adapted to the capabilities of the auxiliary rendering device (receiving data from a web server, the data being properly formatted for the WAP device 100 by WAP gateway and forwarding the content to the WAP device 100, which then sends the content to a printer 120, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32), wherein content of the primary communication session is adapted to the capabilities of the auxiliary rendering device (forwarding the content from the WAP device 100 to a printer 120 in a format that the printer can receive the content, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

Dervarics does not specifically disclose wherein the auxiliary communication is configured to receive an assistance message from the auxiliary rendering device, the assistance message comprising information on the rendering capabilities of the auxiliary rendering device.

Erekson however, discloses, a mobile device (portable computer system 100, see fig. 6, col. 8, lines 25-31) comprising auxiliary unit configured to receive an assistance message from an auxiliary rendering device (remote devices 610-630, see fig. 6, col. 8, lines 25-31), the assistance message comprising information on the rendering capabilities of the auxiliary rendering device (remote devices 610-630 transmitting characteristics and capability information from to the portable computer system 100, see col. 10, lines 43-64).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erekson, by transmitting device characteristics and/or capabilities information of a printer from the printer to a WAP enable mobile phone, into the system of Dervarics for the benefit of setting a proper mode of communication between the mobile phone and the printer.

Dervarics as modified by Erekson does not specifically disclose that the rendering capability of the auxiliary rendering device is greater than that of the mobile device.

Wang however, discloses a mobile device (mobile telephone 2, see fig. 1, col. 2, lines 19-23) communicating wirelessly with an auxiliary rendering device (hi-fi car

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set, see fig. 1, col. 2, lines 18-38 and lines 64-67, col. 3, lines 1-3), wherein rendering capability of the auxiliary rendering device is greater than that of the mobile device (the hi-fi car set has a larger sound signal output than mobile telephone 2, see fig. 1, col. 2 lines 36-48 and lines 64-67, col. 3, lines 1-3).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Wang, by wireless transmitting signals from a mobile device to a hi-fi auxiliary device, into the system of Dervarics as modified by Erikson, for the benefit broadcasting the signal from the mobile phone in an area.

Regarding **claim 21** as applied to claim 20, Dervarics as modified by Erikson discloses the claimed limitation. Dervarics further discloses a rendering unit configured to render content received in the primary communication session (301, see fig. 3, col. 6, lines 59-64, col. 7, lines 1-3); and a rendering control unit configured to examine the content and redirecting the content to the rendering unit and the auxiliary communication unit in dependence on the examination (301, see fig. 3, col. 6, lines 59-64, col. 7, lines 1-8), wherein the auxiliary communication unit is arranged for transmitting the content via the auxiliary communication session for rendering by the auxiliary rendering device (receiving data from a web server, the data being properly formatted for the WAP device 100 by WAP gateway and forwarding the content to the WAP device 100, which then sends the content to a printer 120, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

Regarding **claim 22** as applied to claim 22, Dervarics as modified by Erikson discloses the claimed limitation. Dervarics further discloses wherein the auxiliary communication unit is arranged for establishing the auxiliary communication session in response to the assistance message (receiving identifying commands from server modules for devices 30, 40, and 50, the commands comprising parameters that mobile telephone 1/200 can use to communicate with the devices 30, 40, and 50, see figs. 1-2, col. 6, lines 53-67, col. 7, lines 1-8), and the primary communication means are arranged for transmitting the information on the rendering capabilities to the transcoding proxy (see figs. 1-2, col. 3, lines 51-62, col. 6, lines 53-67, col. 7, lines 1-8).

5. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dervarics 6,553,240** in view of **Erekson 6,622,018** and **Wang 6,484,040** as applied to claim 22 above, and further in view of **Novakov 6,571,103**.

Regarding **claim 23** as applied to claim 22, Dervarics as modified by Erikson and Wang discloses the claim limitation except wherein the auxiliary communication unit is arranged for transmitting an assistance request to at least one auxiliary rendering device.

Novakov, however, discloses a station (see fig. 2, col. 4, lines 58-65) with an auxiliary unit arranged for transmitting an assistance request to at least one auxiliary rendering device (transmitting a page to the mobile station., see fig. 2, col. 5, lines 9-19).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Novakov, by sending a page

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message from to a device, into the system of Dervarics as modified by Erikson and Wang, for the benefit of receiving the identification data associated with the device.

Regarding **claim 24** as applied to claim 23, Dervarics as modified by Erikson, Wang and Novakov discloses the claimed limitation. Dervarics further discloses wherein the primary communication unit is arranged for receiving a communication request for establishing the primary communication session (201, see fig. 2, col. 5, lines 10-13), and the auxiliary communication unit is arranged for transmitting the assistance request in response to receiving the communication request (202, see fig. 2, col. 5, lines 15-18).

Regarding **claim 25** as applied to claim 23, Dervarics as modified by Erikson, Wang and Novakov discloses the claimed limitation. Novakov further discloses wherein the auxiliary communication unit is arranged for transmitting the assistance request when a level for the quality of a previously established auxiliary communication session drops below a predetermined value (see fig. 2, col. 4, lines 58-67).

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Dervarics 6,553,240** in view of **Erikson 6,622,018** and **Wang 6,484,040** and **Otsuka et al 6,330,448 (hereinafter Otsuka)**.

Regarding **claim 15** Dervarics discloses a mobile device (mobile phone 100, see fig. 2, col. 4, line 50), comprising: a primary communication unit (201, see fig. 2, col. 5, lines 10-13) configured to establish a primary communication session via a transcoding proxy (WAP gateway, see col. 3, lines 51-54) with a content server (communication between web server and WAP device 100 via WAP gateway, see fig. 1, col. 3, lines 51-62); and an auxiliary communication unit (202, see fig. 2, col. 5, lines 15-18) configured

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to establish an auxiliary communication session (110, see fig. 1, col. 3, lines 38-40) with an auxiliary rendering device (printer 120, see fig. 1, col. 3, lines 38-40), the auxiliary communication session including content of the primary communication session that is adapted to the capabilities of the auxiliary rendering device (receiving data from a web server, the data being properly formatted for the WAP device 100 by WAP gateway and forwarding the content to the WAP device 100, which then sends the content to a printer 120, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32), wherein content of the primary communication session is adapted to the capabilities of the auxiliary rendering device (forwarding the content from the WAP device 100 to a printer 120 in a format that the printer can receive the content, see fig. 1, col. 3, lines 38-41 and lines 51-61, col. 4, lines 1-4, col. 7, lines 30-32).

Dervarics does not specifically disclose wherein the auxiliary communication is configured to receive an assistance message from the auxiliary rendering device, the assistance message comprising information on the rendering capabilities of the auxiliary rendering device.

Erekson however, discloses, a mobile device (portable computer system 100, see fig. 6, col. 8, lines 25-31) comprising auxiliary unit configured to receive an assistance message from an auxiliary rendering device (remote devices 610-630, see fig. 6, col. 8, lines 25-31), the assistance message comprising information on the rendering capabilities of the auxiliary rendering device (remote devices 610-630 transmitting characteristics and capability information from to the portable computer system 100, see col. 10, lines 43-64).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erikson, by transmitting device characteristics and/or capabilities information of a printer from the printer to a WAP enable mobile phone, into the system of Dervarics for the benefit of setting a proper mode of communication between the mobile phone and the printer.

Dervarics as modified by Erikson does not specifically disclose that the rendering capability of the auxiliary rendering device is greater than that of the mobile device.

Wang however, discloses a mobile device (mobile telephone 2, see fig. 1, col. 2, lines 19-23) communicating wirelessly with an auxiliary rendering device (hi-fi car set, see fig. 1, col. 2, lines 18-38 and lines 64-67, col. 3, lines 1-3), wherein rendering capability of the auxiliary rendering device is greater than that of the mobile device (the hi-fi car set has a larger sound signal output than mobile telephone 2, see fig. 1, col. 2 lines 36-48 and lines 64-67, col. 3, lines 1-3).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Wang, by wireless transmitting signals from a mobile device to a hi-fi auxiliary device, into the system of Dervarics as modified by Erikson, for the benefit broadcasting the signal from the mobile phone in an area.

Dervarics as modified by Erikson and Wang does not specifically disclose a Radio Frequency (RF) level scanner for scanning an RF level of the auxiliary

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communication session and comparing the scanned RF level to a predefined threshold to determine whether the auxiliary communication session is to be migrated to another auxiliary rendering device.

In a similar field of endeavor, Otsuka discloses a system that, measures the received signal and compares it to a threshold in order to determine if a handover is to be made (see figure 3), which reads on the claimed "scanner for scanning an RF level., and comparing the scanned RF level to a predefined threshold to determine whether the auxiliary communication session is to be migrated."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dervarics, Erekson, and Wang with Otsuka et al to include the above migration when the signal strength falls below a threshold in order to provide a user with the best quality of service available.

Allowable Subject Matter

7. Claims 7 and 19 are allowed.

Response to Arguments

8. Applicant's arguments, see page 11-15 of the remarks, filed February 6, 2009, with respect to claims 1 and 20 under 35 U.S.C. § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dervarics 6,553,240, Erekson 6,622,018 and Wang 6,484,040.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/

Supervisory Patent Examiner, Art Unit 2617